

Economics 11; Weekly Assignment Sheet for Week 13 – More on Price-Making Firms; Oligopoly and Strategic Behavior

RECALL: Because of Thanksgiving break, assignments for weeks 12 & 13 will BOTH be discussed during week 13.

A. Text and workbook

1. Text: Chapters 7, 14, & 15.

a. In Chapter 7, what was not read in Week 7; that is, pp. 217-end (sections 7.3 & 7.4).

b. In Chapter 14 & 15, omit nothing.

2. Study guide: Chapters 7, 14, & 15.

a. In Chapter 7, what was not done in Week 7: read pp. 69, last paragraph, & 70 and the Application; do Multiple Choice Questions 1-3, 15 and Problems 3, 5&6.

b. In Chapters 14 & 15, omit nothing.

c. NOTE: The answers given in the back of the Study Guide to the following questions are wrong either in whole or in part (thus it is left to you, at least for now, to find the right answers!): p. 71, #3 (incorrect use of principal - agent terminology, paradigm); p. 76, #3; p. 140, # 6; p. 141, # 12; p. 143, # 20; p. 151, #16; p. 152, #s 18,19,20.

B. Reading(s)

1. Why isn't competitive behavior consistent with perfect competition?

2. Do managers necessarily act in the best interests of their firms' shareholders? What difference does it make if they don't?

C. Puzzles

1. Does the presence of simple monopoly in an otherwise perfectly competitive economy result in inefficiency in production (i.e., the economy being inside its production possibility frontier)? What about the presence of monopolistic competition? Explain!

2. Consider the following peculiar economy: All consumers are identical (equal incomes, tastes, etc.) except for their location along a single perfectly-straight road, on which their homes are all evenly spaced. There are two identical convenience stores (e.g., 7-11's or Wawa's) that sell the same products at the same prices respectively. Thus, regardless of the store patronized, each consumer buys the same products in the same amounts respectively as does any other consumer. Shopping at a convenience store is done only on trips that have no other purpose than to shop at that store. Thus, to minimize the cost of travel to a convenience store, each consumer patronizes the convenience store that is closest to her/his home. Consequently, each convenience store's profits (equal to sales revenue less total costs, which are strictly proportional to sales) depend in a straightforward manner on its location relative to the other store; in fact, a store's relative

location is the sole determinant of how many customers it serves and, correspondingly, its volume of sales and thus profits.

a. In answering the following questions, you are to assume that each consumer's purchases at the convenience store s/he visits are NOT affected by the cost of travel to it.

1. What are the socially optimal locations of the two stores?

2. Where will the two stores in fact be located; that is, what is the Nash equilibrium?

3. What generalizations might one make from this example of spatial competition to competition involving product differentiation; to competition in the political arena?

b. Now assume that each consumer's purchases at the convenience store s/he visits ARE affected by the cost of travel to it. More precisely, assume that each consumer's willingness to pay for convenience store purchases is diminished in strict proportion to the distance traveled to the nearest convenience store.

1. Where would the convenience stores then choose to locate? Are their locations socially non-optimal?

2. What further generalizations might one make considering this extension of the example?

c. Finally, revert to the assumption that each consumer's purchases at the convenience store s/he visits are NOT affected by the cost of travel to it, but now assume that the consumer's are evenly spaced around a circle rather than along a straight line.

1. Answer the same questions asked in part a of the puzzle.

3. Bill, who is uniformly willing to work more hours if paid a higher wage, has only one employment prospect, and that is to work for Mary. The work that Bill does for Mary is subject to diminishing marginal returns. Mary, having taken Econ 11, knows that it is in her interest to act as a monopsonist in hiring Bill's labor, and she does so. Bill just took Econ 11; thus he now recognizes Mary's monopsonistic behavior and thinks he knows how to induce her to behave more in line with his interests. He suspects that he could bribe Mary (i.e., give her a fixed sum of money) to pay him the competitive wage, and that the amount of the necessary bribe would be such that both he and Mary would be better off if she accepted the bribe and paid him the competitive wage. Is Bill right?

4. Bliss Valley is a part of Duetopia, a large economy in which all markets but one are perfectly competitive. The exception is the labor market in Bliss Valley, where Paternal Inc. -- a profit-maximizing manufacturer of Widgies -- is the only employer. While not happy with their employment situation, the folk of Bliss Valley nonetheless choose to stay there. By showing that a marginal rate of substitution (MRS) is NOT equal to the corresponding marginal rate of transformation (MRT), demonstrate that there is resource misallocation in Duetopia.

5. Fertile Valley is located some distance from Grunge Town, from which its farmers obtain the migrant laborers needed at harvest time. The language in Fertile Valley is Farm-speak. In Grunge Town the language is Town-talk. As the only speaker of both languages, Exploit Jones serves as a broker between Ferties and Grungies. He hires Grungies for W_g per day, transports them to the valley, and sells their services to the Fertie farmers for W_f per day. During harvest time, Exploit faces a supply curve of migrant labor given by $L_s = a + b W_g$; he faces a demand curve given by $L_d = x - y W_f$. (Of course, a in the first equation is much less than x in the second.)

Find -- either graphically or mathematically -- the number of migrant workers that Exploit will hire and the wages that he will pay and receive per day for each.